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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,153	02/17/2004	Emmanuel Sedda	GRY-121US	1275

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VALLEY FORGE, PA 19482-0980

EXAMINER

ESHETE, ZELALEM

ART UNIT	PAPER NUMBER
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3748

DATE MAILED: 04/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/780,153

Applicant(s)

SEDDA ET AL.

Examiner

Zelalem Eshete

Art Unit

3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08). | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>6/28;6/14;2/17-04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3,5-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsai et al. (6,308,667).

Regarding claim 1: Tsai discloses an electromechanical valve actuator for internal combustion engines (see figure 7), equipped with a polarized electromagnet exerting magnetic action on a magnetic plate subjected to a mechanical restoring action (see numerals 24,28,38), which magnetic action tends to compensate the mechanical action and maintains the plate in a distant position from the electromagnet (see figures 2,7), characterized in that the actuator comprises means to ensure that the plate is controlled in displacement solely by this electromagnet and the mechanical restoring action such that the plate performs "shuttle" or regular movements starting from the distant position (see abstract, figure 3).

Regarding claim 2: Tsai discloses means to ensure that the distant position of the plate corresponds to an open position of the valve (see figure 7).

Regarding claim 3: Tsai discloses means to move the plate away from the electromagnet by annulling or inverting a supply current of the electromagnet (see column 5, line 52 to column 6, line 55).

Regarding claim 5: Tsai discloses the electromagnet has a shape of an "E" provided with a central "branch" and two end branches (see figure 2), the plate has a cross section which is one of smaller than a cross section of the end branches and smaller than half a cross section of the central branch (see figure 2).

Regarding claim 6: Tsai discloses the electromagnet has an "E" shape and at least one magnet is fixed at the end of at least one of the branches of the "E" shaped electromagnet opposite the plate (see figure 2).

Regarding claim 7: Tsai discloses the mechanical restoring action is generated at least by one spring (see numeral 38).

Regarding claim 8: Tsai discloses internal combustion engine equipped with an electromechanical valve actuator (see figure 1), comprising a polarized electromagnet (see numerals 28,26,24,30), and a mobile magnetic plate subjected to a mechanical restoring action (see numeral 34).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsai in view of Pischinger (6,184,767).

Tsai discloses the claimed invention as recited above; however, fails to disclose the plate is maintained at such a distance that a rod of the valve is distant from a rod of the plate controlling the valve.

However, Pischinger teaches the plate is maintained at such a distance that a rod of the valve is distant from a rod of the plate controlling the valve (see figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify integral element of Tsai by providing arrangement of various elements as taught by Pischinger in order to increase the degree of freedom thereby improving the durability of the device.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zelalem Eshete whose telephone number is (571) 272-4860. The examiner can normally be reached on Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Zelalem Eshete
Examiner
Art Unit 3748




THOMAS DENION
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700